REMARKS

Claims 1-11, 16-42, 44-54 and 99-129 are in the application.

The "Office Action Summary" page and page 2 of the August 23, 2006 Office Action erroneously indicates that claims 1-42, 44-54 and 99-129 are in the application. However, the claims in the application are 1-11, 16-42, 44-54 and 99-129. It is requested that the patent office records so reflect, and the Examiner so examine.

Claims 99-129 have been withdrawn from further consideration. However, the Examiner has overlooked or ignored what Applicant presented in its last-filed response in this regard. Accordingly, the Examiner's August 23, 2006 Action is not fully responsive to Applicant's last-filed response. Specifically, the Examiner asserts that claims 99-129 include a limitation of the non-elected species in reciting that the first electrode has an exposed surface that is being treated. The Examiner so asserts at the bottom of page 10 of the August 23, 2006 Action. The undersigned acknowledges that claims 99-102 have such language. However, claims 103-129 do not. The Examiner's withdrawal of claims 103-129 is fundamentally in error for the reasons which the Examiner states as such claims do NOT include the language to which the Examiner refers. Accordingly, it is respectfully asserted that the Examiner is required to examine at least the added claims 103-129 in this application. Action to that end is requested.

Further regarding claims 99-102, such respectively include all of the limitations of certain claims within the elected species, and accordingly

should be allowed for reasons argued below with respect to the allowability of claims containing all such limitations which are of the elected species.

Independent claim 1 stands rejected as being anticipated by Merchant et al. The Examiner asserts at page 3 of the August 23, 2006 Action that Merchant et al. discloses "treating the exposed oxide containing surface of the capacitor dielectric region with at least one of a silane (col. 4, lines 35-40) (note that it is inherent that the treating step is done without depositing any material onto the exposed oxide-containing surface during the treating step)". However a careful reading of Merchant et al. at col.4, lns.34+ reveals in pertinent part that Merchant et al. only discloses that its capacitor dielectric layer 32 can be formed of "silane oxide". There is absolutely no disclosure, suggestion, or hint of treating an oxide-containing surface with a silane in Merchant et al. Silane oxide is merely a silicon oxide deposited utilizing a silane as a precursor as the source for the silicon which winds up in the silicon oxide (i.e., the "Si" of SiO_2). See, for example, U.S. Patent No. 6,399,522 Tsan et al., which is newly cited herein in an Information Disclosure Statement. Accordingly, during exposure of a substrate to a silane to deposit "silane oxide", a material is deposited (namely, silicon oxide, with the Si from the silane resulting in the formation of a silicon oxide).

Applicant's independent claim 1 recites that the stated treating occurs "without depositing any material onto the exposed oxide-containing surface during any of said treating". The Examiner erroneously asserts in the

quoted language above that it is "inherent" that the treating step be done without depositing any material onto the exposed oxide-containing surface during the treating step. This is fundamentally in error as silicon oxide is deposited in the formation of "silane oxide" using silane as a silicon-source precursor. Accordingly, it is not "inherent" as the Examiner asserts, but rather is exactly the opposite in that deposition of silicon oxide is what does occur.

The Examiner also erroneously asserts on page 3 of the August 23, 2006 Action that "Merchant teaches that the dielectric layer is made of silane oxide which is an inherent result of silane doping of the oxide material". Again, this is fundamentally in error. The simplest silane has the formula SiH_4. Again, silane oxide is merely a slang in the art of a silicon oxide layer deposited using a silane as the silicon-containing precursor in the formation of a silicon oxide on the substrate. If the Examiner is of a different understanding, the undersigned seasonably challenges the Examiner to produce a reference disclosing that "silane oxide" is some sort of oxide which has been doped with, and retains, SiH_4 or other silane therein. Even if the Examiner was able to produce such a reference, it is certainly not "inherent" that the non-disclosed alleged Merchant et al. "treating" step is done without depositing any material during such treating step as the technical art is replete with teaching that "silane oxide" is indeed a material as Applicant asserts above, namely a silicon oxide deposited utilizing a silane as a precursor in the deposition process.

On page 10 of the Examiner's August 23, 2006 Action, it is further asserted that "it is inherent that while depositing silane in the exposed surface, no other material is simultaneously deposited onto the exposed surface". The Examiner further asserts on page 10 that the term "treating is interpreted as the act of depositing silane". Again, the Examiner's assertions in this regard are fundamentally in error. Further, Applicant's independent claim 1 does not include the language "no other material is simultaneously deposited". Rather, Applicant's independent claim 1 recites that the "stated treating occurs without depositing <u>any material</u> onto the exposed oxide-containing surface during any of said treating". Treating/exposing a surface to a material does not require depositing a material thereon, and regardless, Merchant et al.'s reference to a material constituting "silane oxide" in no way implies an act of depositing silane onto anything, and is contrary to a person of skill in the art's understanding of a layer comprising "silane oxide".

For the foregoing reasons, Applicant's claim 1 recites something which is not disclosed by Merchant et al., and the anticipation rejection thereof should be withdrawn. Action to that end is requested.

Further, it would not be obvious to suggest modification of Merchant et al. in arriving at Applicant's claim 1, as the alleged equivalent "treating" in Merchant et al. fundamentally requires a material deposition to form the capacitor dielectric layer, and "treating" without material deposition as recited in Applicant's amended independent claim 1 would defeat the

purpose of forming a capacitor dielectric layer in Merchant et al. Claim 1 is allowable over Merchant et al. as-worded.

Applicant's independent claim 34 stands rejected as being obvious over a combination of Merchant et al. as previously applied in view of Narwankar et al. Claim 34 recites that the treating is void of depositing any material onto the exposed oxide-containing surface during any of said treating, and that the forming of a second capacitor electrode occurs thereafter. Merchant et al. is inapplicable to this limitation for the reasons argued above. The Narwankar et al. reference does not cure the deficiencies asserted above in this regard. Accordingly, Applicant's independent claim 34 recites something which is not found in either of Merchant et al. or Narwankar et al. Therefore, the combination of such references does not encompass all of the limitations of Applicant's claim 34, and the obviousness rejection thereof should be withdrawn. Action to that end is requested.

Claims 99 and 100 contain the same limitations asserted above which are in claims 1 and 34, respectively. Upon allowance of claims 1 and 34 as asserted herein, claims 99 and 100 should come back into this application, as such include all of the limitations of an allowed claim to the elected species. Regardless, claims 103-129 clearly do not read upon the NON-elected species, with the Examiner erroneously asserting that they do. Accordingly, such claims must be examined in this application, and the Examiner's action in this regard is requested. Claims 103-129 should be

allowed for reasons asserted by the undersigned in the last-filed response of July 26, 2006.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

This application is in immediate condition for allowance.

Respectfully submitted,

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